

## **Water Conservation Plan for Existing Small Community Water Systems**

### **Preliminary Well Siting Report - New Hampton Village Precinct March 2008 (Revised April 2008)**

This water conservation plan was prepared in accordance with the requirements described in Env-Ws 390.06: *Requirements for Existing Small Community Water Systems and Certain Water Systems Owned by Landlords*.

The New Hampton Village Precinct (Precinct) performed a major water system improvement project in 1994-1995. This project consisted in the construction of a surface water treatment plant and storage tank, and the installation of individual water meters on all water services including municipal buildings. The meters were selected and installed in accordance with *AWWA Manual of Water Supply Practices M6 – Water Meters*.

To the best of their knowledge, the Precinct is complying with the requirements of Env-Ws 390.06 (b)(1). Namely, the water production meters are read on a daily basis, water production is reported to the NHDES on a monthly basis, and customer meters are read and billed on a quarterly basis.

The Precinct monitors the daily production of water and makes note of any apparent deviations from normal. If these deviations continue, the Precinct looks for leaks and repairs them when they are discovered. In the future, the Precinct will continue this practice so that water system leaks can be repaired as quickly as possible.

An analysis of the water production and metered water for fourth quarter 2007 indicates the following:

- Billed Water (October 1 – December 31, 2007) 2,241,800 gallons
- Water Production (October 1 – December 31, 2007) 2,410,000 gallons
- Unaccounted for Water 168,200 gallons
- Unaccounted for Water percent of total 7%

This analysis demonstrates that the Precinct is not experiencing large unaccounted for water losses that are endemic to the system, i.e. unaccounted for water is less than 15% of water production. This in turn suggests that the integrity of the Precinct's water distribution is good and that it is well maintained. Since customer meters are read on a quarterly basis, the Precinct will continue to perform this quantitative analysis on a quarterly basis. In the event that unaccounted for water exceeds 15%, the Precinct will prepare and submit the response plan, as described in the administrative rules. In addition, it is the Precinct's intent to perform a leak detection study of the entire distribution system if the unaccounted for water exceeds fifteen percent (15%).

The Precinct also understands that the individual customer meters are over 10 years old. It is their intent to begin a meter testing program within the next 5 years to confirm the accuracy of the individual customer meters. It is also the Precinct's intent to perform periodic calibration and testing of the production meters at the water plant. Source production and individual customer meters will be maintained in accordance with AWWA Manual of Water Supply Practices M6 – Water Meters.

The current project involves the permitting of a new bedrock well. This well will be metered separately from the raw water supply, as required by Env-Ws 372.22 (d).

There are some areas of the distribution system that experience high pressures, i.e. pressures exceeding 80 psi. It is the Precinct's intent to determine the feasibility of reducing pressures in these areas to reduce leakage.

The Precinct currently charges a flat rate of \$10.00 per 1,000 gallons with a minimum quarterly charge of \$27.50. The Precinct will review its rate structure within the next 5 years and modify it as appropriate to assure that adequate revenue is generated to pay for the expenses of operating the system and to encourage conservation.

The Precinct intends to distribute the following NHDES fact sheets to all of its customers over the next four billing cycles:

1. DWGB-26-1 *Introduction to Water use Management and Water Efficiency Practices*;
2. DWGB-26-2 *Water Efficiency Practices for Domestic Indoor Water Use*;
3. DWGB-26-3 *Water Efficiency Practices for Outdoor Water Use*
4. DWGB-26-4 *Fundamentals of Xeriscaping and Water-Wise Landscaping*

In addition to these materials, the Precinct will distribute DWGB-26-13 *Water Efficiency Practices for Institutions* to the New Hampton School and the New Hampton Elementary School. The Precinct also will keep a hard copy of these documents available in their office. In subsequent years, the Precinct will continue to remind its customers of the value of water conservation and direct them to information sources, such as the NHDES website, for further information. This will be accomplished as direct mailing with the water bills.

This report will be submitted with the Preliminary Well Siting Report as required by Env-Ws 390.10 (a). The public notification and involvement requirements described in Env-Ws 390.11 will be implemented as well as an educational outreach initiative, using materials prepared by the NHDES. These efforts are described in Env-Ws 390.06 (f) (1) and (2).